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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
JEAN-JACQUES MOREAU ET AL. : Examiner: Not Yet Assigned
Application No.: NYA) Group Art Unit: NYA
Filed: Concurrently Herewith)
For: METHOD AND DEVICE FOR)
PROCESSING AN ELECTRONIC)
DOCUMENT IN A COMMUNI-)
CATION NETWORK : Date: August 7, 2001

Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Prior to calculation of the filing fee, please amend the above-identified application as follows:

IN THE CLAIMS

Please amend Claims 1-35 to read as follows. A marked-up version of the amended claims, showing the changes made thereto, is attached.

1. (Amended) A method for transmitting pages of an electronic document (100) from a client station (10, 12, 13) to a server station (11) connected to each other by a

communication network (1), such that the document is processed by a processing peripheral (14, 20-22), said method including prior steps of generating (S401) orders corresponding to pages of an electronic document to be processed, storing (S401) the orders grouped by page of the document, and sending (S403) a message requesting processing of the document to the server station, said method comprising the steps of:

- (A) receiving (S405) a request message, referred to as a page request, sent by the server station, the page request including information identifying a page of the document;
- (B) translating (S407) in a computer communication language orders corresponding to the page identified in the page request; and
- (C) sending (S409) to the server station a response message containing translated orders corresponding to the page identified in the page request.

2. (Amended) A method according to Claim 1, characterised in that steps (A), (B), and (C) are recommenced until all pages of the document have been sent (S411).

3. (Amended) A method according to Claim 1 or 2, wherein the request message includes an electronic address indicative of a storage location of orders corresponding to a first page of the document to be processed.

4. (Amended) A method according to Claim 3, further comprising the step of, before said step of sending the request message, associating, with each page of the

document, an electronic address indicative of a storage location of orders corresponding to that page,

wherein the response message, containing the translated orders of a page, also includes a storage electronic address of orders corresponding to a following page to be processed of the document; and

wherein the information identifying a page of the document, contained in the page request received from the server station, is a storage electronic address of orders corresponding to a page of the document.

5. (Amended) A method according to Claim 3, wherein the request message includes information identifying a processing peripheral.

6. (Amended) A method according to Claim 5, wherein the information identifying a peripheral is a network address identifying a peripheral on the network.

7. (Amended) A method according to Claim 1, wherein orders corresponding to each page of the document to be processed are stored in a computer file.

8. (Amended) A method according to Claim 7, wherein the computer file for storing the orders is an EMF type file.

9. (Amended) A method of processing an electronic document in a server

station (11) connected via a communication network (1) to at least one client station (10, 12, 13), the server station being responsible for managing at least one electronic document processing peripheral (14, 20-22), said method comprising the steps of:

- (D) receiving (S601, S607) a message coming from a client station, the message including page identification information identifying a page to be processed of an electronic document;
- (E) sending a request message (S605), referred to as a page request, to the client station, the page request including the page identification information, and aimed at obtaining from the client station processing orders corresponding to the page identified by the page identification information; and
- (F) receiving (S607) a response message from the client station, the response message containing the orders corresponding to the identified page translated into a computer communication language.

10. (Amended) A method according to Claim 9, further comprising the step of receiving (S601) a processing request message from the client station, the processing request message including peripheral identification information for identifying a processing peripheral and information identifying a first page to be processed of the document, wherein the response message received (S607) from the client station also includes information identifying a following page to be processed of the document.

11. (Amended) A method according to Claim 10, further comprising the

steps of:

(G) converting (S611) received orders from the computer communication language to a data format appropriate to processing the orders by the processing peripheral identified by the peripheral identification information; and

(H) processing (S613) the orders converted by the identified peripheral.

12. (Amended) A method according to Claim 11, wherein said steps (E) to (H) are recommenced until all pages of the document have been processed.

13. (Amended) A method according to Claim 12, wherein the information identifying a page to be processed of the electronic document is an electronic address indicative of a storage location of orders corresponding to that page.

14. (Amended) A method according to any one of Claims 11 to 13, wherein said step (H) of processing the orders includes generating processing codes, from the converted orders, by a processing driver associated with the processing peripheral, and sending the codes to the processing peripheral.

15. (Amended) A method according to Claim 14, wherein the data format, appropriate to process the orders by the identified processing peripheral, is an EMF format.

16. (Amended) A method according to Claim 1 or 9, wherein the

communication network is an Internet type network.

17. (Amended) A method according to Claim 1 or 9, wherein the client station and the server station communicate using a hypertext transfer protocol (HTTP) type communication protocol.

18. (Amended) A method according to Claim 17, wherein the processing request message, the response message containing the translated orders, and the page request are HTTP messages that include a supplementary field (Xnext) containing an electronic address corresponding to a page to be processed of the document.

19. (Amended) A method according to Claim 1 or 9, wherein the computer communication language is a hypertext markup language (HTML) type language.

20. (Amended) A method according to Claim 19, wherein the communication language is an XML language.

21. (Amended) A method according to Claim 1 or 9, wherein an electronic address at which the orders corresponding to a page of the electronic document is stored is a URL type address.

22. (Amended) A method according to Claim 1 or 9, wherein processing a

document consists of printing the document.

23. (Amended) A device (200) for transmitting pages of an electronic document by a client station (10, 12, 13) to a server station (11) connected by a communication network (1), with a view to processing the document (100) by means of a processing peripheral (14, 20-22), said device including means (201) for generating orders corresponding to pages of the electronic document to be processed, means (205) for storing the orders grouped together by page of the document, and means (203) for sending a document processing request message to the server station, said device comprising:

- means (213) for receiving a request message, referred to as a page request, sent by the server station, the page request including page identification information identifying a page of the document;
- means (211) for translating into a computer communication language the orders corresponding to the identified page in the page request; and
- means (213) for sending to the server station a response message containing the translated orders corresponding to the identified page.

24. (Amended) A device according to Claim 23, further comprising association means (207, 209) for associating with each page of the document an electronic address indicative of a storage location of orders corresponding to that page.

25. (Amended) A device according to Claim 24, wherein said association

means (207, 209) comprises:

- an association table (207) including, for each page of the document, an electronic address indicative of a storage location of orders corresponding to that page; and
- means (209) of updating the association table according to the document to be processed and pages of said document already processed.

26. (Amended) A device according to Claim 24, further comprising means for transmitting pages of an electronic document by:

- (A) receiving (S405) a request message, referred to as a page request, sent by the server station, the page request including information identifying a page of the document,
- (B) translating (S407) in a computer communication language orders corresponding to the page identified in the page request; and
- (C) sending (S409) to the server station a response message containing translated orders corresponding to the page identified in the page request, wherein (A), (B), and (C) are recommenced until all pages of the document have been sent (S411).

27. (Amended) A device (300) for processing an electronic document in a server station (11) connected via a communication network (1) to at least one client station (10, 12, 13), and responsible for managing at least one electronic document processing peripheral (14, 20-22), said device comprising:

- means (301) for receiving a message from a client station, the message including page identification information identifying a page to be processed of an electronic document;

- means (301) for sending a request message, referred to as a page request, to the client station, the page request including the page identification information, and aimed at obtaining from the client station processing orders corresponding to the page identified by the page identification information; and

- means (301) for receiving a response message from the client station, the response message including orders corresponding to the identified page translated into a computer communication language.

28. (Amended) A processing device according to Claim 27, further comprising means (301) for receiving a processing request message from the client station, the processing request message including information identifying a processing peripheral and information identifying a first page to be processed of the document, wherein the response message received from the client station also includes information identifying a following page to be processed of the document.

29. (Amended) A processing device according to Claim 28, further comprising:

- means (306) for converting the received orders from the computer communication language into a data format appropriate for processing the orders by the

processing peripheral identified by said peripheral identification information; and

- processing means (311, 313) for the processing, by the identified processing peripheral, the orders converted into the data format.

30. (Amended) A processing device according to Claim 27, wherein said processing means (311, 313) comprises:

- means (313) for generating processing codes from the converted orders; and

- means (311) for sending the codes to the processing peripheral.

31. (Amended) A processing device according to Claim 28, further comprising a processor that:

receives (S601, S607) a message coming from a client station, the message including page identification information identifying a page to be processed of an electronic document;

sends a request message (S605), referred to as a page request, to the client station, the page request including the page identification information, and aimed at obtaining from the client station processing orders corresponding to the page identified by the page identification information;

receives (S607) a response message from the client station, the response message containing the orders corresponding to the identified page translated into a computer communication language; and

receives (S601) a processing request message from the client station, the processing request message including peripheral identification information for identifying a processing peripheral and information identifying a first page to be processed of the document,

wherein the response message received (S607) from the client station also includes information identifying a following page to be processed of the document.

32. (Amended) A computer system comprising at least one of:

a device for transmitting pages of an electronic document; and

a device for processing an electronic document;

wherein said device for transmitting includes:

- means (213) for receiving a request message, referred to as a page

request, sent by a server station, the page request including page identification information identifying a page of the document,

- means (211) for translating into a computer communication

language orders corresponding to the identified page in the page request, and

- means (213) for sending to a server station a response message that

includes the translated orders corresponding to the identified page, and

wherein said device for processing includes:

- means (301) for receiving a message from the client station, the

message including page identification information identifying a page to be processed of the electronic document;

- means (301) for sending a page request to the client station, the page request including the page identification information, and aimed at obtaining from the client station processing orders corresponding to the page identified by the page identification information, and

- means (301) for receiving a response message from the client station, the response message including the orders corresponding to the identified page translated into the computer communication language.

33. (Amended) A client station connected to a communication network, said client station comprising a device for transmitting pages of an electronic document according to any one of Claims 23 to 26.

34. (Amended) A server station connected to a communication network, said server station comprising a device for processing an electronic document according to any one of Claims 27 to 31.

35. (Amended) A communication network comprising:
a client station according to Claim 23; and
a server station according to Claim 27.

REMARKS

Claims 1-35 are pending for examination. The foregoing amendments to

the claims are presented to place the claims in proper multiple-dependent form and/or to correct certain informalities arising from their translation from a foreign language.

Favorable consideration and early passage to issue are respectfully requested.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should be directed to our address listed below.

Respectfully submitted,



Attorney for Applicants

Registration No. 38,667

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

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VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

1. (Amended) A method for [the transmission of the] transmitting pages of an electronic document (100) [by] from a client station (10, 12, 13) to a server station (11)[,] connected to each other by a communication network (1), [with a view to the processing of] such that the document is processed by a processing peripheral (14, 20-22), [the] said method including [the] prior steps of generating (S401) orders corresponding to [the] pages of [the said] an electronic document to be processed, storing (S401) the [said] orders grouped by page of the document, and sending (S403) a message requesting processing of the document to the server station, [the] said method [being characterised in that it comprises] comprising the [following] steps of:

- (A) receiving (S405) a request message, referred to as a ["]page request["], sent by the server station, the [said] page request including information identifying a page of the document;
- (B) translating (S407) in a computer communication language orders corresponding to the page identified in the page request; and
- (C) sending (S409) to the server station a response message containing [the] translated orders corresponding to the page identified [page] in the page request.

2. (Amended) A method according to Claim 1, characterised in that steps (A), (B), and (C) are recommenced until all [the] pages of the document have been sent (S411).

3. (Amended) A method according to Claim 1 or 2, [characterised in that the said document processing] wherein the request message includes an electronic address indicative of [the] a storage location of [the] orders corresponding to [the] a first page of the document to be processed.

4. (Amended) A method according to Claim 3, [characterised in that it includes]
further comprising the step of, before [the] said step of sending the [said processing] request message, [a step of] associating, with each [of the pages] page of the document, an electronic address indicative of [the] a storage location of [the] orders corresponding to [the] that page [in question; and in that:],

[said] wherein the response message, containing the translated orders of a page, also includes [the] a storage electronic address of [the] orders corresponding to [the] a following page to be processed of the document; and

[said] wherein the information identifying a page of the document, contained in [said] the page request received from the server station, is [the] a storage electronic address of [the] orders corresponding to a page of the document.

5. (Amended) A method according to Claim 3 [or 4], [characterised in that said processing] wherein the request message includes information identifying a processing peripheral.

6. (Amended) A method according to Claim 5, [characterised in that said] wherein the information identifying a peripheral is a network address identifying a peripheral on the network.

7. (Amended) A method according to [any one of the preceding claims, characterised in that the] Claim 1, wherein orders corresponding to each page of the document to be processed are stored in a computer file.

8. (Amended) A method according to Claim 7, [characterised in that] wherein the computer file for storing the orders is [a file of the] an EMF type file.

9. (Amended) A method of processing an electronic document in a server station (11)[,] connected via a communication network (1) to at least one client station (10, 12, 13), [and] the server station being responsible for [the management of] managing at least one electronic document processing peripheral (14, 20-22), [the] said method [being characterised in that it comprises] comprising the [following] steps of:

(D) receiving (S601, S607) a message coming from a client station, [said] the message including page identification information identifying a page to be processed of an electronic document;

(E) sending a request message (S605), referred to as a page request, to the client station, [said] the page request including [said] the page identification information, and aimed at

obtaining from the client station [the] processing orders corresponding to the page identified by the page identification information; and

(F) receiving (S607) a response message from the client station, [said] the response message containing the orders corresponding to the identified page translated into a computer communication language.

10. (Amended) A method according to Claim 9, [characterised in that it includes a prior] further comprising the step of receiving (S601) a processing request message [coming] from the client station, [said] the processing request message including peripheral identification information for identifying a processing peripheral and information identifying a first page to be processed of the document[; and in that said], wherein the response message received (S607) from the client station also includes information identifying a following page to be processed of the document.

11. (Amended) A method according to Claim 10, [characterised in that it also includes] further comprising the [following] steps of:

(G) converting (S611) [the] received orders [received,] from the computer communication language to a data format appropriate to [the] processing [of said] the orders by the processing peripheral identified by [said] the peripheral identification information; and

(H) processing (S613) [said] the orders converted by the identified peripheral.

12. (Amended) A method according to Claim 11, [characterised in that] wherein said steps (E) to (H) are recommenced until all [the] pages of the document have been processed.

13. (Amended) A method according to Claim 12, [characterised in that said] wherein the information identifying a page to be processed of the electronic document is an electronic address indicative of [the] a storage location of [the] orders corresponding to [the] that page [in question].

14. (Amended) A method according to any one of Claims 11 to 13, [characterised in that the] wherein said step (H) of processing the [said] orders includes [a step of] generating [the] processing codes, from [said] the converted orders, by a processing driver associated with [said] the processing peripheral[; and a step of], and sending [said] the codes to [said] the processing peripheral.

15. (Amended) A method according to Claim 14, [characterised in that said] wherein the data format, appropriate to [the processing of said] process the orders by the identified processing peripheral, is [the] an EMF format.

16. (Amended) A method according to [any one of the preceding claims, characterised in that said] Claim 1 or 9, wherein the communication network is [a] an Internet type network [of the Internet type].

17. (Amended) A method according to [any one of the preceding claims, characterised in that] Claim 1 or 9, wherein the client station and the server station communicate using a hypertext transfer protocol (HTTP) type communication protocol [of the “hypertext transfer protocol” (HTTP) type].

18. (Amended) A method according to Claim 17, [characterised in that said] wherein the processing request message, [said] the response message containing the translated orders, and [said] the page request are HTTP messages [including] that include a supplementary field (Xnext) containing [the] an electronic address corresponding to a page to be processed of the document.

19. (Amended) A method according to [any one of the preceding claims, characterised in that said] Claim 1 or 9, wherein the computer communication language is a hypertext markup language (HTML) type language [of the “hypertext markup language” type].

20. (Amended) A method according to Claim 19, [characterised in that said] wherein the communication language is [the] an XML language.

21. (Amended) A method according to [any one of the preceding claims, characterised in that the] Claim 1 or 9, wherein an electronic address at which the orders corresponding to a page of the electronic document [are] is stored is [an] a URL type address [of

the URL type].

22. (Amended) A method according to [any one of the preceding claims, characterised in that the] Claim 1 or 9, wherein processing [of] a document consists of [a] printing [of] the document.

23. (Amended) A device (200) for transmitting pages of an electronic document by a client station (10, 12, 13) to a server station (11) connected by a communication network (1), with a view to processing the document (100) by means of a processing peripheral (14, 20-22), [the] said device [having] including means (201) for generating [the] orders corresponding to [the] pages of [said] the electronic document to be processed, means (205) for storing [said] the orders grouped together by page of the document, and means (203) for sending a document processing request message to the server station, [the] said device [being characterised in that it comprises] comprising:

- means (213) for receiving a request message, referred to as a [“]page request[”],

sent by the server station, [said] the page request including page identification information identifying a page of the document;

- means (211) for translating into a computer communication language the orders corresponding to the identified page in the page request; and

- means (213) for sending to the server station a response message containing the translated orders corresponding to the identified page.

24. (Amended) A device according to Claim 23, [characterised in that it has] further comprising association means (207, 209) for associating with each [of the pages] page of the document an electronic address indicative of [the] a storage location of [the] orders corresponding to [the] that page [in question].

25. (Amended) A device according to Claim 24, [characterised in that the] wherein said association means (207, 209) [include] comprises:

- an association table (207) [containing] including, for each page of [said] the document, an electronic address indicative of [the] a storage location of [the] orders corresponding to [the] that page [in question]; and
 - means (209) of updating the association table according to the document to be processed and [the] pages of said document already processed.

26. (Amended) A device according to Claim 24 [or 25, characterised in that it has], further comprising means [adapted for implementing a method of] for transmitting [the] pages of an electronic document[, in accordance with any one of Claims 2 to 22] by:

- (A) receiving (S405) a request message, referred to as a page request, sent by the server station, the page request including information identifying a page of the document,
- (B) translating (S407) in a computer communication language orders corresponding to the page identified in the page request; and
- (C) sending (S409) to the server station a response message containing translated

orders corresponding to the page identified in the page request,

wherein (A), (B), and (C) are recommended until all pages of the document have been sent (S411).

27. (Amended) A device (300) for processing an electronic document in a server station (11)[,] connected via a communication network (1) to at least one client station (10, 12, 13), and responsible for [the management of] managing at least one electronic document processing peripheral (14, 20-22), [the] said device [being characterised in that it comprises] comprising:

- means (301) for receiving a message [coming] from a client station, [said] the message including page identification information identifying a page to be processed of an electronic document;

- means (301) for sending a request message, referred to as a [“]page request[”], to the client station, [said] the page request including [said] the page identification information, and aimed at obtaining from the client station [the] processing orders corresponding to the page identified by the page identification information; and

- means (301) for receiving a response message from the client station, [said] the response message [containing the] including orders corresponding to the identified page translated into a computer communication language.

28. (Amended) A processing device according to Claim 27, [characterised in that

it also has] further comprising means (301) for [first] receiving a processing request message [coming] from the client station, [said] the processing request message including information identifying a processing peripheral and information identifying a first page to be processed of the document[; and in that said], wherein the response message received from the client station also includes information identifying a following page to be processed of the document.

29. (Amended) A processing device according to Claim 28, [characterised in that it also has] further comprising:

- means (306) for converting the received orders [received,] from the computer communication language into a data format appropriate [to the] for processing [of said] the orders by the [computer] processing peripheral identified by said peripheral identification information; and

- processing means (311, 313) for the processing, by the identified processing peripheral [of said], the orders converted into [said] the data format.

30. (Amended) A processing device according to Claim 27, [characterised in that] wherein said processing means (311, 313) [include] comprises:

- means (313) for generating processing codes from [said] the converted orders;
and

- means (311) for sending [said] the codes to [said] the processing peripheral.

31. (Amended) A processing device according to [any one of Claims] Claim 28

[to 30, characterised in that it has means adapted to implementing a processing method according to any one of Claims 10 to 22], further comprising a processor that:

receives (S601, S607) a message coming from a client station, the message including page identification information identifying a page to be processed of an electronic document;

sends a request message (S605), referred to as a page request, to the client station, the page request including the page identification information, and aimed at obtaining from the client station processing orders corresponding to the page identified by the page identification information;

receives (S607) a response message from the client station, the response message containing the orders corresponding to the identified page translated into a computer communication language; and

receives (S601) a processing request message from the client station, the processing request message including peripheral identification information for identifying a processing peripheral and information identifying a first page to be processed of the document,

wherein the response message received (S607) from the client station also includes information identifying a following page to be processed of the document.

32. (Amended) A computer system [including] comprising at least one of:

a device for transmitting [the] pages of an electronic document [according to any

one of Claims 23 to 26, and/or]; and

a device for processing an electronic document [according to any one of Claims 27 to 31];

wherein said device for transmitting includes:

- means (213) for receiving a request message, referred to as a page request, sent by a server station, the page request including page identification information identifying a page of the document,

- means (211) for translating into a computer communication language orders corresponding to the identified page in the page request, and

- means (213) for sending to a server station a response message that includes the translated orders corresponding to the identified page, and

wherein said device for processing includes:

- means (301) for receiving a message from the client station, the message including page identification information identifying a page to be processed of the electronic document;

- means (301) for sending a page request to the client station, the page request including the page identification information, and aimed at obtaining from the client station processing orders corresponding to the page identified by the page identification information, and

- means (301) for receiving a response message from the client station, the response message including the orders corresponding to the identified page translated into the

computer communication language.

33. (Amended) A client station connected to a communication network,
[characterised in that it has] said client station comprising a device for transmitting [the] pages of
an electronic document[,] according to any one of Claims 23 to 26.

34. (Amended) A server station connected to a communication network,
[characterised in that it has] said server station comprising a device for processing an electronic
document according to any one of Claims 27 to 31.

35. (Amended) A communication network [including at least one] comprising:
a client station according to Claim [33.] 23; and
[at least one] a server station according to Claim [34] 27.